we have a fixed form breeding either toward *bairdi* or *oregonia*. To this form, characterized by more yellow on the bands of the wings than in *P. bairdi*, and less than in *oregonia*, Mr. Edwards has applied the name *P. brucei*, in honor of Mr. Bruce of Lockport, New York, who has done much to elucidate the problems connected with the species. Expanse, 3.25-3.60 inches.

Early Stages.—These have been fully described by Edwards. They are much like those of *asterias*, and the food-plants belong to the same class.

Bruce's Butterfly is found quite abundantly in Colorado.

(16) Papilio hollandi, Edwards, Plate XL, Fig. 3, ♂ (Holland's Butterfly).

Butterfly.—This species or form, which belongs to the Asterias-group, in the breadth of the yellow spots on the upper side of the wings holds a place intermediate between *P. bairdi* and *P. zolicaon*, between which it has been suggested that it may be a hybrid, which has become fixed, and therefore a species. It is characterized by the fact that the abdomen is always striped laterally with yellow or is wholly yellow. Expanse, 3.25-3.50 inches.

Early Stages.—We know as yet but little of these.

The insect occurs in Arizona and northward to Colorado.

(17) Papilio asterias, Fabricius, Plate XL, Fig. I, ♂; Plate II, Figs. 17, 24, 27, *larva;* Plate VI, Figs. 13, 18, 19, *chrysalis* (The Common Eastern Swallowtail).

Butterfly.—The male is well represented in the plate. The female lacks the bright-yellow band of postmedian spots on the primaries, or they are but faintly indicated. The species is subject to considerable variation in size and the intensity of the markings. A very remarkable aberration in which the yellow spots cover almost the entire outer half of the wings has been found on several occasions, and was named

Papilio *calverleyi* by Grote. The female of this form from the type in the author's collection is represented in Plate XLI, Fig. 6. Expanse, 2.75-3.25 inches.

Early Stages.—The caterpillar feeds on the *Umbelliferæ*, and is common on parsley and parsnips in gardens. In the South I have found that it had a special liking for fennel, and a few plants in the kitchen-garden always yielded me in my boyhood an abundant supply of the larvæ.